Backward Presentation is Dangerous Detour

by Heather Smith Thomas

Most calves are born head first, front feet extended and ready to face the world. Unfortunately, a few are positioned backward. These calves are on a dangerous detour.

Our veterinarian once told us a person is lucky to save one out of 10 backward calves. This may be true when cows are being observed infrequently, but with a little diligence, you can beat those odds.

Years ago, when our herd calved in late spring out in the pasture, we averaged a 4 percent death loss. Often we'd find the newborn calf dead and never know what happened. Most cattle producers assume these are stillborn, but that's not generally the case.

Most calves found dead are normal, healthy calves that died during the birth process. Either the birth took too long — due to a malpresentation — or the amnion sac over the calf didn't break and the calf suffocated.

Since 1969 we have calved in winter on our Idaho ranch. We put the cows in small pens near the house or barn and observe every birth. As a result, our annual birth losses have been cut drastically, to less than 1 percent.

During the past 22 years we have had a total of 46 backward and breech calves in our 150-head cow herd — an average of about two per year. We've lost only four calves. One died because we didn't check the cow soon enough. The calf was breech and hadn't entered the birth canal. She wasn't straining, but she'd been in labor too long and the placenta detached. The other three losses occurred during birth — big calves too difficult to deliver fast enough.

Every posterior presentation is a potential emergency for breeders. If the backward calf's hind legs don't enter the birth canal or are in a breech position, the calf cannot be born. The legs must be brought into the birth canal before the birth process can continue.

Even if the legs do enter the canal, the birth is generally so slow that the calf drowns or suffocates when the umbilical cord breaks or pinches off since its head and shoulders are still inside the cow.

If a posterior presentation is recognized early, however, there's a greater chance of saving the calf by assisting the cow and speeding the birth by pulling it.

The backward calf is at a great disadvantage because its body is not streamlined as it comes through the birth canal. The hips are the first large part to come through, instead of its head and shoulders, and are often very difficult to pass. The calf's ribcage tends to catch on the cow's pelvis in the process, as well.

The umbilical cord may be pinched off or broken early in calving, making it urgent that the calf be born immediately. Occasionally, the cord will be caught over a hind leg, stretched and broken. This happens if one of his legs passes under the cord as they straighten out and go into the birth canal.

During early labor, when the fetus is quite active, if the calf extends its hind legs and they enter the birth canal, it can usually be born with some human assistance. But if the calf doesn't get its legs extended into the birth canal, it cannot be born in this breech or sitting position. The hind legs must be brought into the birth canal. If this proves too difficult, your veterinarian should be called right away and the calf must be delivered by Caesarean section.

Early Warning Signs

If the calf is breech, the cow takes a long time in early labor and may not start straining at all. This is because the strong abdominal contractions, which herald the start of second-stage (active) labor, don't begin until some part of the calf enters the birth canal, stimulating the reflex contractions of the cow's abdominal muscles. When the cow does start to strain, she is jamming the calf's hocks or hips into the birth canal.

If a cow appears to be in early labor but doesn't progress to hard straining when you think she should, check her. Call your veterinarian or give assistance yourself and correct the malpresentation before the cow has been in labor too long. If assistance is given soon enough, the abnormal position can often be corrected by bringing the calf's legs into the birth canal and a live calf delivered. Otherwise, the placenta will eventually detach and the calf will die.

If the feet protrude from the cow's vulva, you can usually tell they are hind feet because the heels and dewclaws are up rather than down, and the bottoms of the hooves point skyward.

Before you assume the calf is backward, however, check. Tie or restrain the cow in a chute and reach inside with a well-lubricated obstetrical glove covering your hand and arm. Occasionally, a frontward calf will be upside down or sideways with its legs twisted so that when the feet protrude, they are pointed skyward. Al-

ways be sure which part of the calf is being presented before you put chains on and start to pull.

Breeders who are present at calving time have a much better chance of saving backward calves. Cows calving unobserved out in the pasture will generally lose their malpresented calves or may die of complications.

Easy Does It

When helping a cow with a backward calf, go gently at first until the calf's hips are free and his ribcage safely through the cow's pelvis. Once the hips are clear, then hurry the calf on out. If you rush too much at first, you may injure the cow and kill the calf. It's common to crush a calf's ribcage by pulling it out too forcefully, too soon.

If the calf is large, you may not be able to deliver it fast enough without a mechanical calf puller or the assistance of several people. A mechanical calf puller with cable and winch can put a lot of traction on a calf. Care must be taken not to pull too fast. When using a puller, stop for a moment and put the chains above the calf's hocks after you get it out far enough. This will give you more room to winch.

If the calf is long-legged, you may run out of cable just about the time you need to be pulling the fastest. There's nothing more frustrating than getting a big calf almost out, then losing it because you ran out of calf puller. We learned this the hard way on one of the four backward calves we lost.

To successfully pull large, backward calves, you'll need to extend your calf puller with a piece of pipe to make it longer, or routinely switch your pulling chains from the calf's hooves to above its hocks, to give yourself more cable length.

In a breech presentation, it's easier to manipulate the hind legs of the calf if the cow is standing. Then you can get both arms into the birth canal. The calf must first be pushed back into the uterus as far as possible. Then grasp a leg, bend the hock joint and lift it upward. Draw the calf's foot backward in an arc, keeping the hock joint flexed tightly and the calf pushed as far forward as possible.

Next, lift the calf's foot (one at a time) up over the cow's pelvis and cup your hand around the hoof so it doesn't tear the uterus. Once both legs are in the birth canal, you can attach chains and pull the calf.

Breath of Life

Once you get the calf out, the next task is to get all fluids out of its air passages and get it breathing. The calf may be alive, but still in grave danger because its air passages are full of fluid, its extended time in the birth canal, or its umbilical cord is pinched off or broken.

Many backward calves at delivery will look dead — limp and blue, eyes glassy. But a quick feel of the chest behind the front legs on its left side will reveal a heartbeat. These calves can be saved if their air passages are cleared right away and breathing started.

If a calf doesn't start breathing immediately, hang him upside down briefly. Hold the hind legs or drape it gently over a pole fence (the pole just ahead of his stifles). As he hangs head downward, fluid should drain from the nostrils. You can then stimulate the calf to cough and start breathing by sticking a clean piece of hay or straw up one nostril. If the calf is conscious, this tickling will make it cough and start breathing.

If the calf is unconscious and you can't get it to cough, hang it up briefly to get out as much fluid as possible, then close its mouth and cover one nostril, blowing air into the other nostril. Giving a calf artificial respiration can keep it alive until there is enough oxygen in its system to revive the calf.

Mother Nature Rules

Veterinarians used to think that backward calves were carried in that position during gestation. Thanks to modern technology and the remarkable sonogram, we know that this is not the case.

During the fetus' development it floats freely in the uterine fluids and moves around a great deal. When labor starts, the calf may be in a variety of positions. Most shift position during early labor, ending up in the proper fashion to be born. A few, however, due to lack of uterine space (small cow, big calf) or some other factor, will be malpresented.

Out of curiosity, on several occasions we've had our veterinarian check the position of the fetus at pregnancy check time. We preg check about three months before calving, when the cows come off summer range in the fall. We discovered that many of our cows' fetuses are positioned backward at that time.

Mother Nature has them pretty well programmed for getting into the proper position for birth. But there are always the odd few that have to be difficult. It's up to you to get them safely born.

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PRE-CALVING CHECKLIST

ANIMAL CARE

- ❑ Pre-calving nutrition
- ❑ Post-calving nutrition
- ❑ Feeding schedule
- ❑ Pre-calving dam vaccinations
- ❑ Pre-calving dam supplements
- ❑ 30 day exposure to ranch/farm or maternity premises

SUPPLIES

- ❑ 2% or 7% tincture of iodine
- ❑ Frozen colostrum bank
- ❑ Obstetrical lubrication
- ❑ Adequate water source, preferably warm
- ❑ Dishwashing liquid, providone-iodine scrubs or other disinfecting scrubs
- ❑ Plastic sleeves
- ❑ Medications and/or injectables
- ❑ Syringes and needles
- ❑ Ear tags
- ❑ Tattoo ink

EQUIPMENT

- ❑ Obstetrical chains, straps or cotton clothesline
- ❑ Fetal head snare
- ❑ Fetal extractor (calf puller)
- ❑ Calf-feeding bottle
- ❑ Esophageal feeder
- ❑ Iodine dispenser
- ❑ Hair clippers with sharpened blades
- ❑ Halters

FACILITIES

- ❑ Sheltered area for obstetrical work
- ❑ Clean bedding available
- ❑ Straight sided head catch
- ❑ Maternity pens or stalls with feed and water

PERSONNEL TRAINING

- ❑ Stages of labor
- ❑ Guidelines for intervention
- ❑ Tests for delivery
- ❑ Amount of traction
- ❑ Direction of pull
- ❑ Proper aftercare